

List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 9 (Cancelled).

10. (Currently Amended) A variable field device for process automation, including:

a superordinated control-evaluation unit;

a sensor module SM for measured-value detection of a process variable in an application;

a signal processing module SPM connected ~~thereto~~ to said sensor module SM;

a communication module CU; and

a processor module PM, which is connected with said communications module CU for connection of the field device with said superordinated control-evaluation unit, wherein:

said signal processing module SPM and said processor module PM are provided in the form of a reprogrammable logic device LD; and

at system start, both hardware and software are configured on said reprogrammable logic device LD in a desired fashion thereby matching the particular demands of the application of said sensor module SM.

11. (Previously presented) The variable field device as claimed in claim 10, wherein:

said reprogrammable logic device LD includes parts of said communication module CU.

12. (Previously presented) The variable field device as claimed in claim 10, wherein:

said reprogrammable logic device includes parts of said sensor module SM.

13. (Previously presented) The variable field device as claimed in claim 10, wherein:

said reprogrammable logic device LD includes all digitally working components of said sensor module SM.

14. (Previously presented) The variable field device as claimed in claim 10, wherein:

said reprogrammable logic device LD includes at least one embedded processor EP, one memory M and one logic L.

15. (Previously presented) The variable field device as claimed in claim 10, wherein:

said reprogrammable logic device LD serves, in operation, as an SOPC-system (system-on-a-programmable-chip).

16. (Previously presented) The variable field device as claimed in claim 10, wherein:

said communications module CU has a data bus interface, which comprise one of: Profibus®, Foundation Fieldbus®, and CAN®-Bus.

17. (Previously presented) The variable field device as claimed in claim 10, wherein:

said communications module CU has a data bus interface which comprises one of: one or more analog inputs/outputs I/O's, which are one of: frequency output, and pulse output.

18. (Previously presented) The variable field device as claimed in claim 10, wherein:

a function block is loaded into said reprogrammable logic device LD.

19. (Previously presented) The variable field device as claimed in claim 18, wherein:

said function block is a Flexible Function Block of one of: Foundation Fieldbus; and a Profibus function block.